ABSTRACT OF THE DISCLOSURE

A bonded substrate stack formed by bonding first and second substrates is appropriately separated at a porous layer. The first and second substrates are brought into tight contact with each other while shifting their central positions. The bonded substrate stack (30) has a projecting portion at which the peripheral edge of the first substrate projects outside that of the second. The projecting portion is positioned to a reference position by a positioning apparatus (1000). After that, the bonded substrate stack (30) is transferred to a separating apparatus, and separation starts from the projecting portion. Positioning is done by detecting the shift amount between the peripheral edge of the first substrate and that of the second substrate throughout the perimeter of the bonded substrate stack (30), determining the position of the projecting portion on the basis of the shift amount, and rotating a substrate rotating table (1010) to make the projecting portion match the reference position.